This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-6 (Canceled).

Claim 7 (Original): A method for executing an optimized version of a program, comprising:

executing an optimized version of a program;

receiving an interrupt during execution of the optimized version of the program and returning execution control to an operating system;

executing an original version of the program;

monitoring a hardware performance counter during the executing of the original version of the program;

when the hardware performance counter reaches a threshold during the executing of the original version of the program, switching execution control to a dynamic optimizer; and

continuing the executing of the optimized version of the program as directed by the dynamic optimizer.

Claim 8 (Original): The method of claim 7, wherein the executing of the optimized version of the program includes executing an optimized binary code file for the program.

Claim 9 (Original): The method of claim 7, wherein the executing of the original version of the program includes executing original binary code for the program.

Claim 10 (Original): The method of claim 7, wherein the hardware performance counter is selected from the group consisting of an instruction counter and a cycle counter.

Claim 11 (Original): The method of claim 7, wherein the hardware performance counter is a cycles per instruction counter.

Claim 12 (Original): The method of claim 7, wherein the threshold is set to a value that is indicative of unacceptable performance.

Claim 13 (Original): The method of claim 7, wherein the hardware performance counter is integrated into a central processing unit.

Claims 14-17 (Canceled).

Claim 18 (Currently Amended): Computer readable media having encoded thereon a computer program including a set of ~~containing~~ program instructions for causing a computer to execute ~~executing~~ an optimized version of a program, the computer program ~~readable media~~ comprising:

program instructions for executing an optimized version of a program;

program instructions for receiving an interrupt during execution of the optimized version of the program and returning execution control to an operating system;

program instructions for executing an original version of the program;

program instructions for monitoring a hardware performance counter during the executing of the original version of the program;

program instructions for switching execution control to a dynamic optimizer when the hardware performance counter reaches a threshold during the executing of the original version of the program; and

program instructions for continuing the executing of the optimized version of the program as directed by the dynamic optimizer.

Claim 19 (Original): The computer readable media of claim 18, wherein the executing of the optimized version of the program includes executing an optimized binary code file for the program.

Claim 20 (Original): The computer readable media of claim 18, wherein the executing of the original version of the program includes executing original binary code for the program.

Claim 21 (Original): The computer readable media of claim 18, wherein the hardware performance counter is selected from the group consisting of an instruction counter, a cycle counter, and a cycles per instruction counter.

Claim 22 (Original): The computer readable media of claim 18, wherein the threshold is set to a value that is indicative of unacceptable performance.

Claim 23 (New): A method for executing an optimized version of a program, comprising:

executing an optimized binary code file for a program;

receiving an interrupt during execution of the optimized binary code file for the program and returning execution control to an operating system;

executing original binary code for the program;

monitoring a hardware performance counter during the executing of the original binary code for the program;

when the hardware performance counter reaches a threshold that is indicative of unacceptable performance during the executing of the original binary code for the program, switching execution control to a dynamic optimizer; and

continuing the executing of the optimized binary code file for the program as directed by the dynamic optimizer.

Claim 24 (New): The method of claim 23, wherein the hardware performance counter is selected from the group consisting of an instruction counter and a cycle counter.

Claim 25 (New): The method of claim 23, wherein the hardware performance counter is a cycles per instruction counter.

Claim 26 (New): The method of claim 23, wherein the hardware performance counter is integrated into a central processing unit.

Claim 27 (New): Computer readable media having encoded thereon a computer program including a set of program instructions for causing a computer to execute an optimized version of a program, the computer program comprising:

program instructions for executing an optimized binary code file for a program;

program instructions for receiving an interrupt during execution of the optimized binary code file for the program and returning execution control to an operating system;

program instructions for executing original binary code for the program;

program instructions for monitoring a hardware performance counter during the executing of the original binary code for the program;

program instructions for switching execution control to a dynamic optimizer when the hardware performance counter reaches a threshold that is indicative of unacceptable performance during the executing of the original binary code for the program; and

program instructions for continuing the executing of the optimized binary code file for the program as directed by the dynamic optimizer.

Claim 28 (New): The computer readable media of claim 27, wherein the hardware performance counter is selected from the group consisting of an instruction counter, a cycle counter, and a cycles per instruction counter.